UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/292,265	04/15/1999	THOMAS J. OLSON	25771	3301

23494	7590	02/11/2003

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EXAMINER
WONG, ALLEN C

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/292,265	OLSON, THOMAS J.
	Examiner	**Art Unit**
	Allen Wong	2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>12 December 2002</u> .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,3-6,9-12,15-17,22,25,27,29,40-43,46-49,52-54 and 56</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,3-6,9-12,15-17,22,25,27,29,40-43,46-49,52-54 and 56</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

12/12/02 has been entered.

Response to Arguments

Applicant's arguments filed 12/12/02 have been fully read and considered but

they are not persuasive.

Regarding lines 25-29 on page 4 of applicant's remarks about claims 1, 22, 25

and 29, applicant contends that the cited portion of Seeley's column 10, lines 19-31

does not teach the automatic selection of an image including an identified object. The

examiner respectfully disagrees. Carefully perusing the examiner's citation, Seeley

states "When viewing of one scene is completed, another camera is selected by the

operator or CAC." Note Seeley discloses that "the operator or the CAC", where the

CAC is the central alarm computer as noted in Seeley's column 8, lines 20-21, can

select another camera where the other camera is focusing on another image. The CAC

or the central alarm computer is clearly controlling the selection of an image when the

operator is not in manual control. And since Seeley teaches that can be in either

manual control (ie. operator) or automatic control (ie. CAC, central alarm computer), the

examiner is relying on Seeley's teaching of a CAC to meet the claimed limitations of the automatically selected image. Furthermore, Seeley also teaches that the CAC can automatically pan tilt or zoom images and the generation of a log or list of the saved identifying information, as evidenced by Seeley's column 10, lines 19-31 citation.

2.   With regards to lines 19-25 on page 5 of applicant's remarks, applicant asserts that Seeley does not teach the selected saved thumbnail image since Seeley does not teach the automatically selected image from the previous citation of Seeley's column 10, lines 19-31. The examiner respectfully disagrees. As elaborated in the above paragraph, Seeley does teach the automatically selected image. And since Seeley does teach the automatically selected image, Seeley clearly teaches the selected saved thumbnail image, as disclosed in Seeley's col.15, lines 24-30 and fig.7, picture buffer 40. Please see the rejection below.

3.   Regarding lines 20-23 on page 6 of applicant's remarks, applicant states that neither Seeley nor Gorr suggests the teaching of attempting to detect a "visible and large" image of a person's face. The examiner respectfully disagrees. Seeley teaches the recognition and classification of certain images and objects such humans, non-humans, or the unknown, as disclosed in col.5, line 58 to col.6, line 2. Thus, Seeley clearly teaches the detection of a visible and large image of a person's face. If Seeley did not teach the detection of a visible face, how else would Seeley be able to recognize an intruder to properly trigger an alarm? Please see the rejection below.

4.   With regards to lines 7-10 on page 7 of applicant's remarks, applicant mentions that neither Seeley nor Gorr teaches the lowermost side or the size of a bounding box

for a given change region. The examiner respectfully disagrees. Seeley's col.10, lines 19-31, Seeley discloses that either the operator or the CAC, central alarm computer, can zoom in the camera on the desired object or scene of interest, and when an object is zoomed, a bounding box appears on the object or scene of interest. Please see rejection below.

5.   Regarding lines 18-20 and lines 29-31 on page 7, lines 6-8, lines 16-18, lines 27-28 on page 8, lines 5-7 on page 9 of applicant's remarks, applicant argues that neither Seeley nor Gorr teaches the detected change region. The examiner respectfully disagrees. As col.5, line 58 to col.6, line 2; note Seeley discloses that certain alarm conditions need to be met before indicating the presence of an intruder. Note that the alarm is activated if there is movement in the detected change region. Further, Seeley discloses that motion detection requires recognition algorithms and various processes, analysis and classification schemes to find out if an intruder is present, see col.11, lines 37-61. Please see the rejection below.

Regarding lines 23-27 on page 9 of applicant's remarks, applicant asserts that neither Seeley nor Gorr discloses the "bounding box". The examiner respectfully disagrees. The examiner has already addressed the limitation in the above paragraphs and in the rejection below. Seeley's figure 7, element 40 and figures 13-14, elements 406a-406n and 506a-506n are video buffers. Then, in col.10, lines 19-31, Seeley discloses the that either the operator or the CAC, central alarm computer, can zoom in the camera on the desired object or scene of interest, and when an object is zoomed, a bounding box appears on the object or scene of interest.

Regarding lines 18-19, 28-29 on page 10 of applicant's remarks, applicant remarks that thumbnails are not stored. The examiner respectfully disagrees. The thumbnail images are stored in the system in Seeley's figure 7, element 40 and figure 13, element 406a-406n. If the thumbnail images are not stored, then the display for these thumbnail images would not be possible because these images would be lost without storage. And in lines 8-9 on page 11 of applicant's remarks, applicant contends that neither Seeley nor Gorr teaches the image saved at the higher resolution. The examiner respectfully disagrees. Seeley's figure 8B, the reference image is saved at a first resolution, a thumbnail image with a lower resolution where as in figure 8A, the reference image is saved at higher resolution, at "full resolution". And lines 1-2 of applicant remarks, applicant states that Seeley fails to teach the bounding box displayed within reference image. Peruse Seeley's figure 15 and note that in display 602, there is a bounding box Y in element 602b and that element 602c displays Y.

Regarding lines 14-16 on page 12 of applicant's remarks, applicant mentions that Seeley does not teach the saving of the motion track information after the object is no longer present. The examiner respectfully disagrees. Seeley teaches the saving of information in figure 7, element 40 and also the retrieval of information can be done by the central station. If Seeley did not have memory or video image storage, then the images cannot be saved for display. Further, Seeley teaches the tracking of movement and trajectory or path of movement is tracked, as disclosed in col.11, line 62 to col.12, line 3. Thus, Seeley teaches the motion track information after the object is no longer present.

Regarding line 31 on page 12 to line 1 on page 13 of applicant's remarks, applicant asserts that neither Seeley, Gorr, nor Baxter teach the display of event labels on a reference image. The examiner respectfully disagrees. Applicant's figure 8 merely shows a event log or list of times that can be associated with a reference image. Seeley's column 10, lines 28-31 discloses that the CAC (central alarm computer) maintains a event log for each tour that contains information on when the cameras were used to track images. In other words, Seeley discloses the tracking of an object image and the times associated with that object image. Seeley's display 602 in figure 15 can be used to display all the important information including event labels.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1, 3-6, 9-12, 15-17, 22, 25, 29, 40-43, 46-49 and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seeley (6,069,655) in view of Gorr (5,961,571).

Regarding claim 29, Seeley discloses an apparatus for monitoring an area, comprising:

a detector which is operative to periodically detect an image of the area (note in figure 2, there are numerous cameras 22 monitoring and detecting successive images;

also in figure 7, element 22 obtains the successive images and sends them to image

processor 30 where there image detection is done in element 34); and

an image processing section which is responsive to the detector and which is

operative to (fig.2, element 30 is an image processor and that element 36 is responsive

to the detecting section 34):

identify and track a moving object in a succession of the detected images

(figure 7, element 36; note Seeley discloses the evaluation of images where the events

and objects are identified, tracked, recognized and labeled; also note that Seeley

teaches the ability to compare frames to determine whether or not there is an alarm

condition as disclosed col.12, lines 22-29);

automatically select a single image of each identified object utilizing

selection criteria (col.10, lines 19-31; Seeley discloses the selection of the

identifying object information by using selection criteria, panning, tilting, or

zooming into the identifying information in an event of interest; also note log or

list of the saved identifying information is generated);

save the selected image of each identified object (col.15, lines 24-30;

Seeley discloses the selection of image information from the detected images; further,

Seeley discloses the storing or saving of the image information into picture buffer 40 of

figure 7); and

automatically save information which identifies the path of movement of

the object, and to retain the information after the object ceases to be present in

current detected images (Seeley discloses the saving of information in fig.7,

element 40 and also the retrieval of information can be done by operator or the computer residing at the central station CS).

Seeley does not disclose the limitation of "discard and not save detected images other than said selected image of each identified object". However, Gorr teaches the deletion or the discarding of redundant or non-essential image information (col.3, lines 45-55; Gorr focuses on saving the most important target image information while deleting image information that is not within the specified ring area or the target image area). Therefore, it would have been obvious to one of ordinary skill in the art to implement the teachings of Seeley and Gorr, as a whole, for maximizing the storage capacity and unload any unnecessary image information. Doing so would improve lower the financial costs and permit efficient image processing in intrusion monitoring applications.

Note claims 1, 22 and 25 have similar corresponding elements.

Regarding claims 3-6, 9-12 and 40-43 and 46-49, Seeley discloses the selection criteria to determine what kind of event is the intrusion (col.5, line 58 to col.6, line 2; note Seeley discloses that certain alarm conditions need to be met before indicating the presence of an intruder; col.6, lines 32-41, Seeley discloses saving of the time of intrusion and other historical data; col.11, line 42, Seeley discloses the image is continually or periodically updated). Also, Seeley discloses the selecting of an image that is larger than other images in a set of images (col.10, lines 19-31; note Seeley discloses that either the operator or the CAC, central alarm computer, can zoom in the camera on the desired object or scene of interest, and when an object is zoomed, a

bounding box appears on the object or scene of interest). As stated above, Seeley does not disclose the discarding of images. However, Gorr teaches the deletion or the discarding of redundant or non-essential image information (col.3, lines 45-55; Gorr focuses on saving the most important target image information while deleting image information that is not within the specified ring area or the target image area). Therefore, it would have been obvious to one of ordinary skill in the art to implement the teachings of Seeley and Gorr, as a whole, for maximizing the storage capacity and unload any unnecessary image information. Doing so would economically decrease the financial costs and allow fast, accurate image processing in intrusion monitoring tasks.

Regarding claims 15 and 52, Seeley discloses the saving of the detected image that corresponds to a bounding box (figure 7, element 40; figures 13-14, element note elements 406a-406n and 506a-506n are video buffers; in col.10, lines 19-31, Seeley discloses the that either the operator or the CAC, central alarm computer, can zoom in the camera on the desired object or scene of interest, and when an object is zoomed, a bounding box appears on the object or scene of interest).

Regarding claims 16, 17, 53 and 54, Seeley discloses the image resolution of the reference image saved at a first resolution and at a second resolution higher than the first (note in figure 8B, the reference image is saved at a first resolution, a thumbnail image with a lower resolution where as in figure 8A, the reference image is saved at higher resolution, at "full resolution"). Also, Seeley's figure 15, element 602 is a display device. Seeley discloses the display of the reference image at a higher resolution in figure 15, element 602c and the display of the reference image at a lower resolution in

figure 15, element 602b, where Y is the thumbnail image selected for being separately

viewed in 602c.

1.   Claims 27 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Seeley (6,069,655) and Gorr (5,961,571) in view of Baxter (5,966,074).

Regarding claims 27 and 56, Seeley discloses the storage of image information

(figure 7, element 40; figures 13-14, element note elements 406a-406n and 506a-506n

are video buffers) and the display of image information (figure 15, element 602). Seeley

discloses that the CAC (central alarm computer) maintains a event log for each tour that

contains information on when the cameras were used to track images, as disclosed in

column 10, lines 28-31. Seeley discloses the display that can be used for displaying

intrusion information (fig.15, element 602), like event labels, intrusion image, etc.

Seeley and Gorr do not specifically disclose the display of the path of movement of the

object or intruder. However, Baxter teaches the display of the trajectory or path of

movement of the intruder (col.1, lines 43-49). Therefore, it would have been obvious to

one of ordinary skill in the art to combine the teachings of Seeley, Gorr and Baxter for

permitting the display of the intruder's trajectory so as to accurately retrace the

intruder's actions. Doing so would provide strong evidentiary support of the intruder's

unlawful entry on the premises.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Allen Wong whose telephone number is (703) 306-

5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Allen Wong
Examiner
Art Unit 2613

AW
January 29, 2003

CHRIS KELLEY
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